

Title: REGISTER FILE AND
METHOD FOR DESIGNING A
REGISTER FILE

Inventor(s): Akira MOCHIZUKI
DOCKET NO.: 081848-0189

Owner : 0352950853

33 / 40

FIG. 1

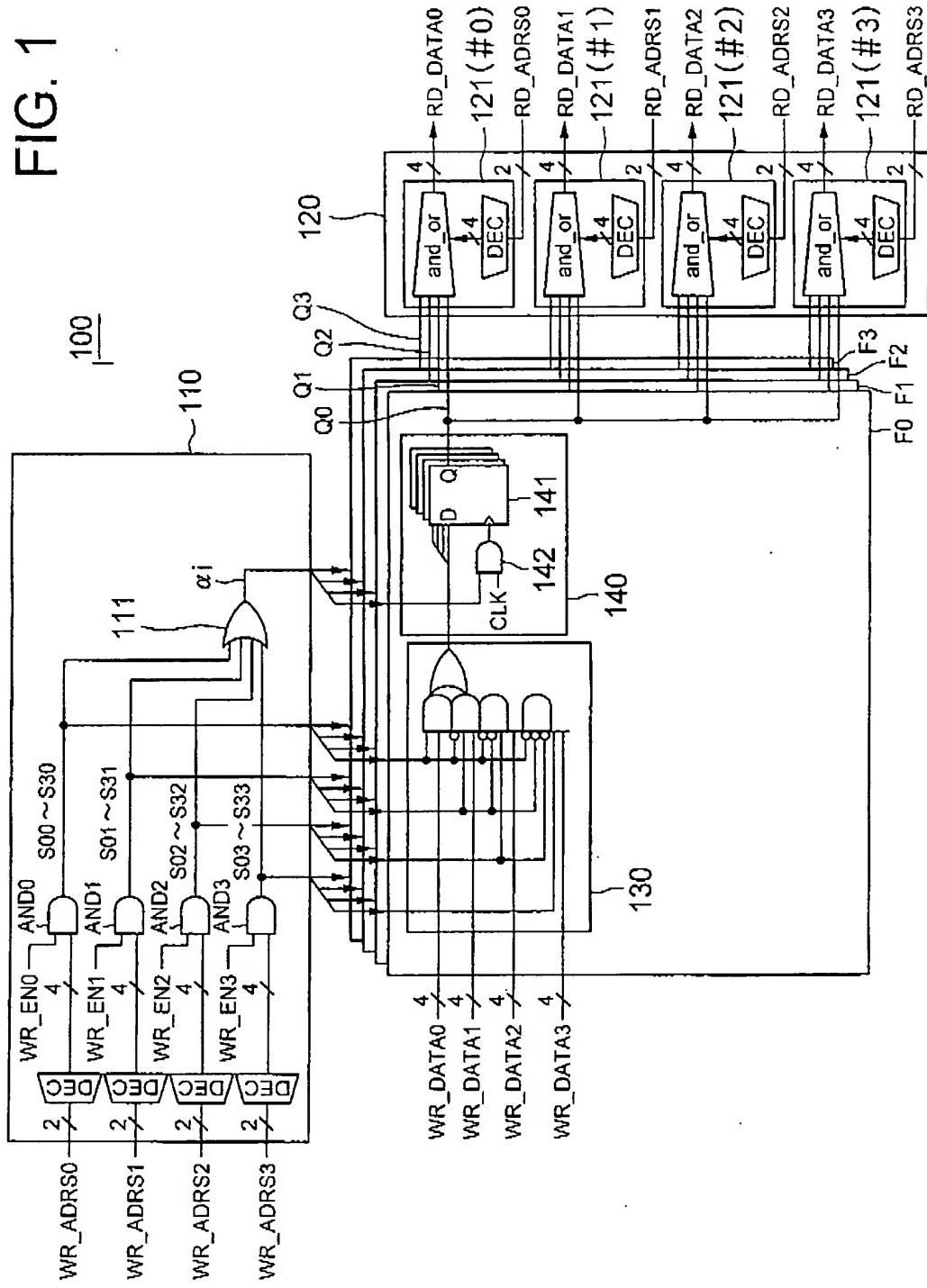


FIG. 2

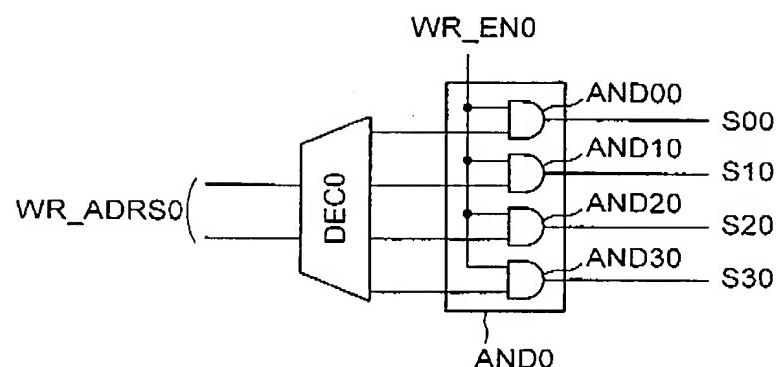


FIG. 3

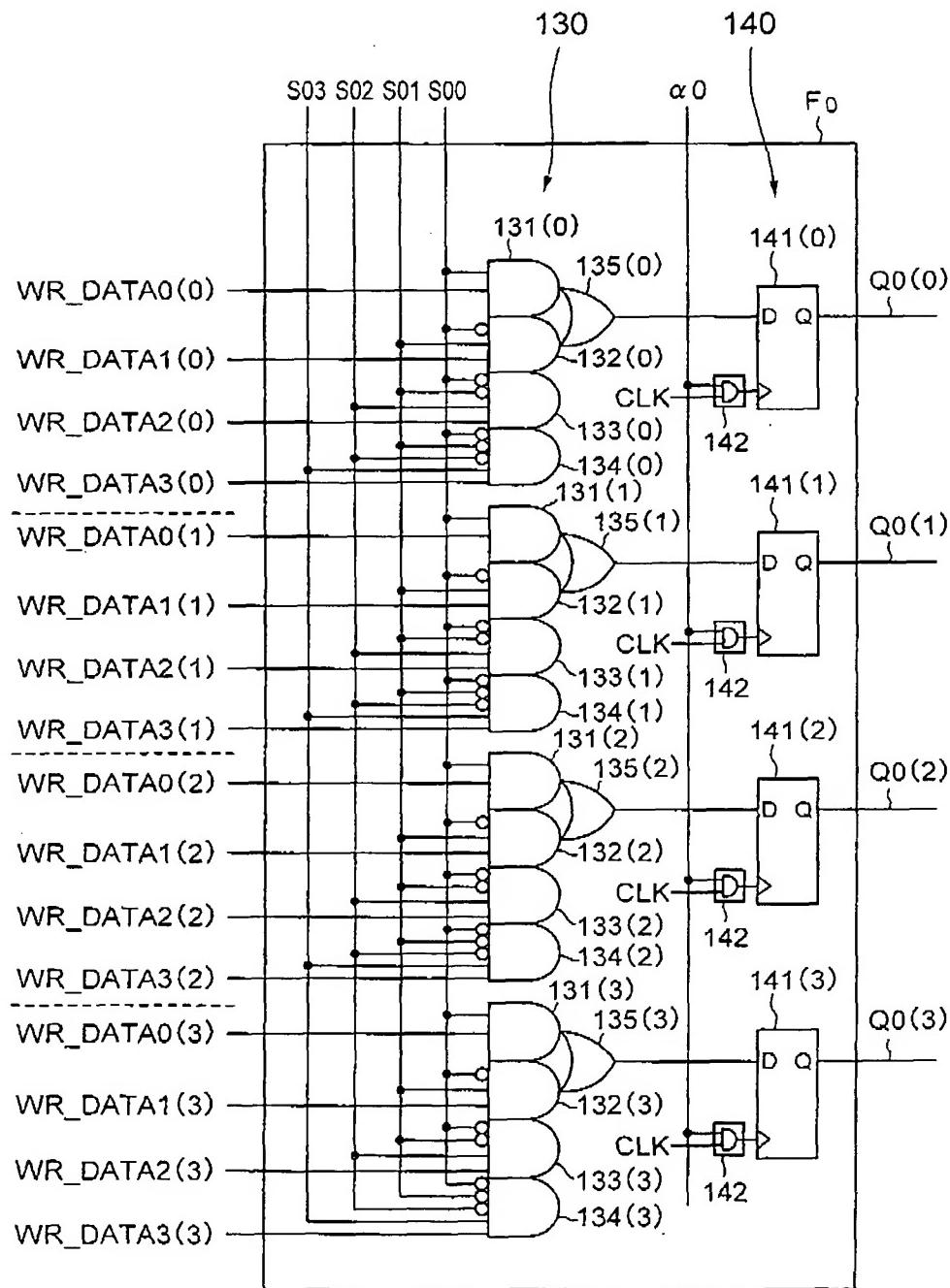


FIG. 4A

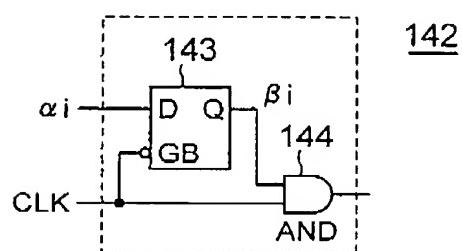


FIG. 4B

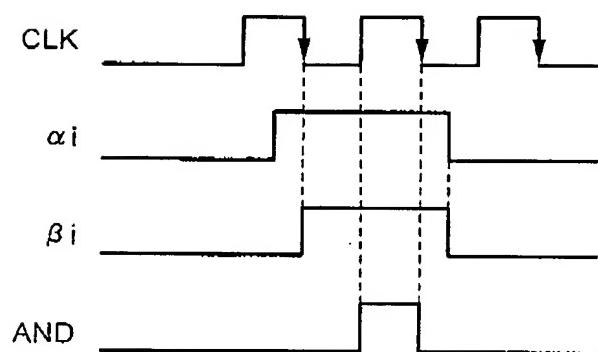


FIG. 5

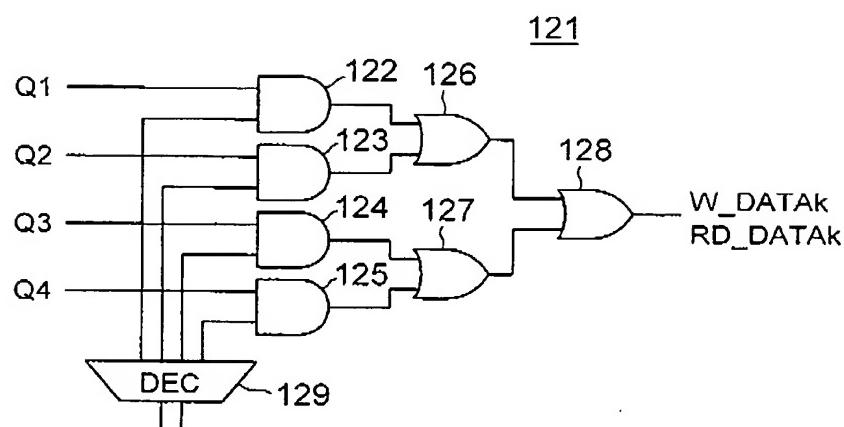


FIG. 6

```
assign Y = Q0 & ~S[1] & ~S[0] |
           Q1 & ~S[1] & S[0] |
           Q2 & S[1] & ~S[0] |
           Q3 & S[1] & S[0] ;
```

FIG. 7

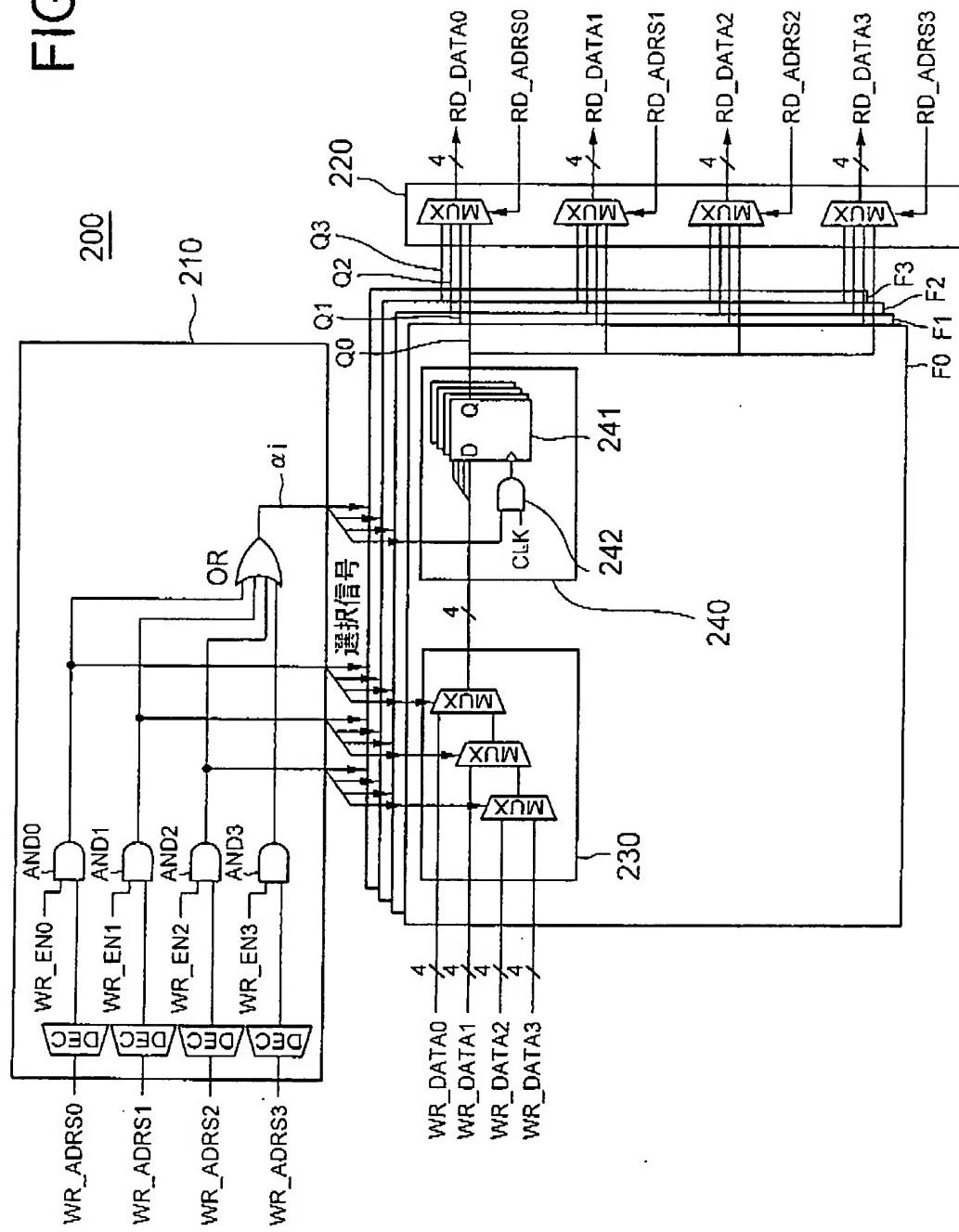


FIG. 8

```
case (S)
 2'b00:Y = Q0
 2'b01:Y = Q1
 2'b10:Y = Q2
 2'b11:Y = Q3
endcase
```

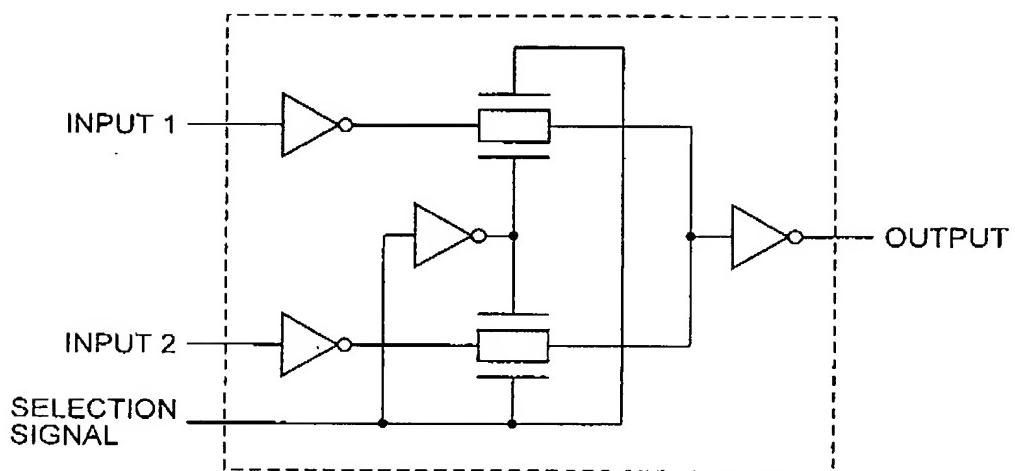
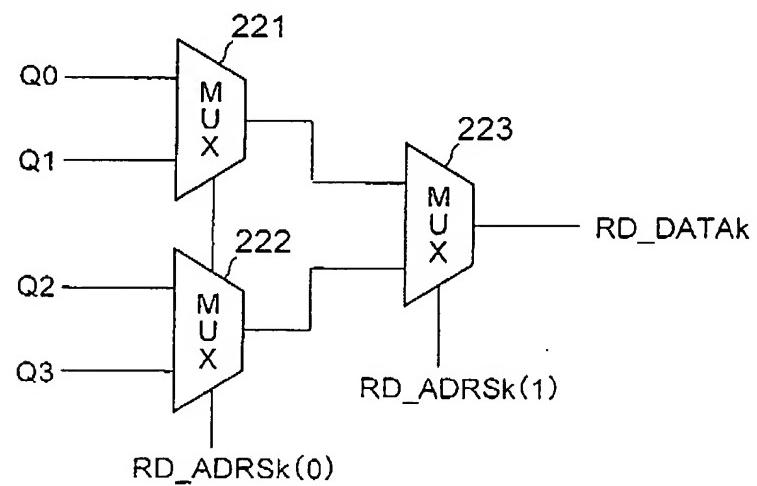
FIG. 9**FIG. 10**

FIG. 11

